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ABSTRACT

The Value Added Program for assessing undergraduate education at Northeast Missouri State University is described. The program is in its 12th year and has as its driving force a comprehensive student data base that includes measures of individual student performance at the entering freshman level and at the end of the sophomore year, as well as performance on a senior exam in the major field of study. In addition, student surveys are conducted concerning the college environment and the perceived quality of academic and support services. Alumni are also surveyed. Nationally normed tests are used as the performance measures. The purpose of the data-gathering is to improve instruction in that the data collected provides useful information to faculty and students. Faculty use tests as a basis for course and program review. The assessment process permeates the institution and facilitates instructional and administrative improvements. Twenty-nine pages of exhibits and tables summarize the university's approach, changes in test results, budget, outcomes, and quotations about the program from leading individuals and publications in education. 10 references. (KM)

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Quality, Assessment, and Accountability
in
Undergraduate Education

ED293380

Sponsored by the

National Governors Association Task Force
on
College Quality

Park Terrace Airport Hilton Hotel
St. Louis, Missouri
December 16-17, 1985

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The Value Added Program:
Assessing Undergraduate Education
Northeast Missouri State University
Kirksville, Missouri
December, 1985

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QUALITY, ASSESSMENT, AND ACCOUNTABILITY
IN UNDERGRADUATE EDUCATION

Sponsored by the
NATIONAL GOVERNORS ASSOCIATION TASK FORCE ON COLLEGE QUALITY
St. Louis, Missouri
December 16-17, 1985

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Materials
on the

THE VALUE ADDED PROGRAM:
Assessing Undergraduate Education

Prepared by Northeast Missouri State University
Kirksville, Missouri

Charles J. McClain, President

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The AAHE ASSESSMENT FORUM is a three-year project supported by the Fund for the Improvement of Postsecondary Education. It entails three distinct but overlapping activities:

--an annual conference
(the first scheduled for June 14-17, 1987, in Denver)

--commissioned papers
(focused on implementation and other timely assessment concerns; available through the Forum for a small fee)

--information services
(including consultation, referrals, a national directory, and more)

This paper is part of an on-going assessment collection maintained by the Forum. We are pleased to make it more widely available through the ERIC system.

For further information about ASSESSMENT FORUM activities, contact Patricia Hutchings, Director, AAHE ASSESSMENT FORUM, One Dupont Circle, Suite 600, Washington, DC 20036

Address Presented to the

National Governors Association Task Force on College Quality

Hearing, St. Louis, Dec. 16-17, 1985

Governor Ashcroft, Task Force Members, I am Charles McClain, President of Northeast Missouri State University at Kirksville, Missouri.

My first objective is to extend my personal thanks to each of you for the vital task you are undertaking--to a college president (or at least to this college president), concern on the part of the National Governors Association for quality, assessment, and accountability in undergraduate education is indeed welcome. And on a more personal note, I am delighted that this Task Force is chaired by an education-minded governor--our very own John Ashcroft. I know how he feels about education and how important his feelings are to our success in Missouri. The simple fact is that public higher education needs your enlightened concern and your leadership in creating a climate which will enable and encourage institutions to pursue excellence and to prove to the public when it has been achieved.

My charge this morning is to share with you our experience at Northeast with a program for improving the quality of undergraduate education at a modest-sized regional state university. The program is in its 12th year and has as its driving force a comprehensive student data base which includes measures of individual student performance at the entering freshman level and at the end of the sophomore year, as well as performance on a senior exam in the major field of study. In our model, we supplement academic

performance data with student surveys about the college environment and the perceived quality of academic and support services. Alumni are also surveyed to gain their perspectives about their education after several years of real-world experience.

Our performance measures are nationally normed tests. For example, to measure growth in the liberal arts (general education) we use the ACT Examination and ACT Comprehensive Examination as a pre-/post-test battery. This is the "value added" component of our assessment model. In a subject matter major, we use a national exam developed by the experts in the field. For example, accounting majors take the AICPA Level II Examination -- history majors take the GRE Field Exam, and so on.

One might ask, why national tests? For us, the answer relates to one of the goal statements that is a part of our mission--to produce graduates who are nationally competitive. If such a statement is indeed an institutional goal, how does one demonstrate accountability without assessment--which produces a base for national comparisons?

From the outset we were well aware of the discussions and debates surrounding the world of testing. We concluded that the new reality dictated that we use the imperfect (existing tests) to improve. It isn't supposed to work, but it does. It works because we made it very clear from the beginning that the purpose of the data is to improve instruction. The data collected provides useful information to both faculty and students. Faculty use test results as a basis for course and program review--if students are not performing at expected levels, is there a problem with the curriculum or could it perhaps be a problem with course selection, and so on?

Students could use the data for self-assessment of their strengths and weaknesses.

While some nationally known education research writers have voiced some concern over the potential for misuse of field of study exams in our model (and we agree), Dr. Cliff Adelman of the National Institute for Education points to the importance of the student and alumni survey component. In a recent article (after critiquing the values and possible pitfalls of subject field exams) Dr. Adelman noted, and I quote:

> But there is a different--and perhaps more valuable--type of learning that takes place at NMSU. A learning which the examinations stimulate, but do not control. Because the assessment process permeates the institution, departments are in a perpetual state of self-reflection, refining instructional objectives and teaching methods. NMSU was wise to add a set of attitudinal surveys to assist in the process, surveys that follow the student body through the University and into life. For the students, knowledge that the University cares about their perceptions as much as their performance is extraordinarily important, and perhaps accounts for their acceptance of what might be regarded as a very intrusive program of pulse-taking. For the faculty and administration, student and alumni perceptions are goads to the improvement process, and have resulted in changes such as the raising of admission criteria, revision of audit and course withdrawal policies, the improvement of the academic advisement system, the hiring of new faculty, and the purchase of instructional equipment. There is no question that all this

evolves naturally from an institutional culture dominated by a commitment to documenting what happens to students in college.

An important principle underpinning our approach is that test results are not used in a punitive way. Assessment is viewed at Northeast as a means to an end--not an end in and of itself. The purposes are improved quality and accountability--improved quality in teaching and in student performance, and accountability to the state, to the employer, to the student, and to the parents.

So, Mr. Chairman, I would conclude on the topic of value of external assessment by saying that in my 26 years in higher education, I have witnessed nothing that has the potential for improving the quality of undergraduate education that a well-designed assessment program has. But I would caution that assessment must be tied to purpose or mission, and any model must be cooperatively designed with a high degree of faculty leadership. A nurturing environment is vital.

In the case of Northeast, we were fortunate to have state-level leadership which encouraged risk taking. We have Commissioner Shaila Aery who was an early supporter and recommended funding for our effort. We have a governor who sees the potential and who values quality education.

Needless to say, I am a strong advocate of assessment and accountability. Assessment provides the road map to the attainment of quality. Without it, we don't know where we are and have little direction as to where we need to go.

As to what value my remarks might have to the members of this Task Force, I think each of you as the Governor of your state can set the tone and create the environment for real reform in

undergraduate education. You can provide the incentive for assessment as a basis for improving quality. You can reward quality through funding when it is demonstrated. How much better this would be than funding on numbers.

I agree with Governor Kean; you should not dictate an assessment model nor mandate improvements from the top down. But state leaders can seek out and encourage solutions within the institutions of higher education. You can create conditions under which assessment can evolve. You can be willing to use state dollars to fund risk-takers who come up with appropriate challenges and meet these challenges.

In a sense, the latter is what happened in our case. We are a better institution because of our 12-year experience with our assessment model, and we can prove it. But more importantly, our students are getting a better education and we can prove that, too.

Our model may not be for every institution. Indeed, I would say it probably is not. But it is a model designed for our purpose and mission. And if you agree with Secretary Bennett, the higher education community needs to get into the business of assessment and the results need to impact how colleges do business. We believe it is in our best interest and in the best interest of the nation to assess our performance and publish the results, because without such data rumormills prevail and demonstrated quality remains an illusive dream. On this point, I agree with him. The quality of teaching, as well as curriculum reform, are not meaningful without stated goals and a system for measuring our success. Granted, different institutions will have different goals,

and they should. And they will have different approaches to assessment, and they should. But all should assess. We owe it to our students, to our state and to our nation.

Mr. Chairman, I applaud you and this Task Force for providing this forum. Again, I thank you for the opportunity to appear this morning; I would be glad to answer questions.

THE UNIVERSITY

THE COMMON PERCEPTION IS THAT A UNIVERSITY EXISTS TO

- EFFECT HIGHER EDUCATION
- BRING ABOUT POSITIVE CHANGE IN THE STUDENT
- INCREASE THE STUDENT'S ABILITY TO LEARN
- PROVIDE A SCHOLARLY ENVIRONMENT
- FULFILL ITS SPECIFIC MISSION AND PURPOSES

THE UNIVERSITY IN THE 1960s

EVENTS DIVERTED ATTENTION FROM COMMONLY PERCEIVED OUTCOMES

- SOCIAL MILIEU OF THE TIME
- CHANGING MISSIONS OF MANY UNIVERSITIES
- EXPANSION OF FINANCIAL RESOURCES BASED ON ENROLLMENT FORMULAE
- EASY ACCESS; RELAXED ADMISSION STANDARDS
- ENROLLMENT (QUANTITY/NUMBERS) EMPHASIS
- SELF-PACED COURSES
- FLEXIBILITY IN PROGRAM REQUIREMENTS
- GRADE INFLATION
- "PLEASE EVERYONE" APPROACH
- EMPHASIS ON RESEARCH VS TEACHING/LEARNING (Sputnik)

THE UNIVERSITY OF THE 1970s

PERCEPTION OF TRENDS HERALDED NEED FOR CHANGE IN ...

- LEVEL OF EXCELLENCE
- RESULT OF TEACHING/LEARNING PROCESS
- ACHIEVEMENT OF INDIVIDUAL STUDENTS COMMENSURATE WITH POTENTIAL
- GUIDANCE PROVIDED INDIVIDUAL STUDENT
- ACCOUNTABILITY FOR COMPETENCY OF GRADUATED
- FOCUS ON QUALITY RATHER THAN QUANTITY
- CURRICULUM THAT CHANGES WITH THE MISSION
- CLIMATE AND EDUCATIONAL AGENDA OF THE UNIVERSITY
- EMPHASIS . . . CURRICULUM
  . . . STUDENT PERFORMANCE and ACHIEVEMENT
  . . . TIME ON TASK OF LEARNING
  . . . FACULTY PERFORMANCE and DEVELOPMENT
  . . . UNIVERSITY ENVIRONMENT

THE UNIVERSITY IN THE 1980s

THE NATION COUNTERACTS . . .

- MAY, 1983
  A NATION AT RISK
  (CITES DECLINE IN TEST SCORES)

- OCTOBER, 1984
  INVOLVEMENT IN LEARNING
  (CITES ASSESSMENT AS ELEMENT OF INVOLVEMENT)

- FEBRUARY, 1985
  INTEGRITY IN THE COLLEGE CURRICULUM
  (ADDRESSES ACCOUNTABILITY FOR DEGREE INTEGRITY)

- MARCH, 1985
  A CALL FOR CHANGE IN TEACHER EDUCATION
  (CALLS FOR STIFFER ADMISSIONS, MORE LIBERAL ARTS, TOUGHER GRADUATION REQUIREMENTS, A PROFESSIONAL PROGRAM)

- In Search of Excellence . . . IN SEARCH OF EDUCATIONAL EXCELLENCE!

NORTHEAST MISSOURI STATE UNIVERSITY — 1970

THE CHALLENGES NORTHEAST FACED . . .

- MISSION CHANGE FROM TEACHERS COLLEGE TO MULTIPURPOSE UNIVERSITY
- INTERNAL CHANGE IN PROGRAMS TO SERVE DIVERSITY IN MISSION
- EXTERNAL IMAGE CHANGE TO VERIFY COMPREHENSIVE NATURE OF NORTHEAST
- STUDENT BODY CHANGE WITH NEW INTERESTS AND DEMANDS
- CHANGE IN AVAILABLE COLLEGE POPULATION (DECLINE)
- CHANGE IN FACULTY ORIENTATION TO MULTIPURPOSE MISSION
- CHANGE IN MODE OF ACCOUNTABILITY TO ASSURE COMPETENCY OF GRADUATES
- NEED TO KNOW MORE ABOUT THE STUDENT AND STUDENT LEARNING

NORTHEAST MISSOURI STATE UNIVERSITY — 1970 - 1973

. . . ASSESSMENT BECAME THE ANSWER . . .

THE FUNDAMENTAL GOALS OF ASSESSMENT BASED ON EMPIRICAL DATA

- TO KNOW EVERYTHING POSSIBLE ABOUT THE STUDENT
- TO DEMONSTRATE THAT THE UNIVERSITY MADE A POSITIVE DIFFERENCE IN THE LIFE OF EACH STUDENT
- TO DEMONSTRATE THAT OUR GRADUATES WERE NATIONALLY COMPETITIVE

NORTHEAST MISSOURI STATE UNIVERSITY — 1970 - 1973

THE PROCESS OF BUILDING AN ASSESSMENT PROGRAM

- DESIGN A THEORETICAL CONSTRUCT (FLOW CHART)
  - Conceptualize data items
  - Identify levels of analysis
  - Focus on purposes of assessment model
  - Link with desired outcomes
- UTILIZE ALL DATA ALREADY AVAILABLE
  - Demographic
  - Ability
  - Achievement
  - Survey
- COLLECT THE DESIRED DATA ELEMENTS
  - Put into format easily understood
  - Assemble in manner easily communicated
- ANALYZE DATA BY ORGANIZATIONAL UNITS OF THE UNIVERSITY
  - University-wide
  - Division/school/college
  - Discipline
  - Major
  - Individual student (For advisement purposes)
- PROVIDE ACCESS TO THE DATA TO ALL LEVELS OF THE UNIVERSITY
- PROVIDE LONGITUDINAL DATA FOR COMPARISONS OF EACH UNIT AGAINST ITSELF
- FOCUS ATTENTION ON LEARNING
  - Data supports learning process
  - Data raises instructional/learning questions
  - Data identifies areas to be strengthened
  - Data rewards achievement and achievers

NORTHEAST MISSOURI STATE UNIVERSITY — 1973

NORTHEAST COUNTERACTS . . . THE VALUE ADDED MODEL OF ASSESSMENT

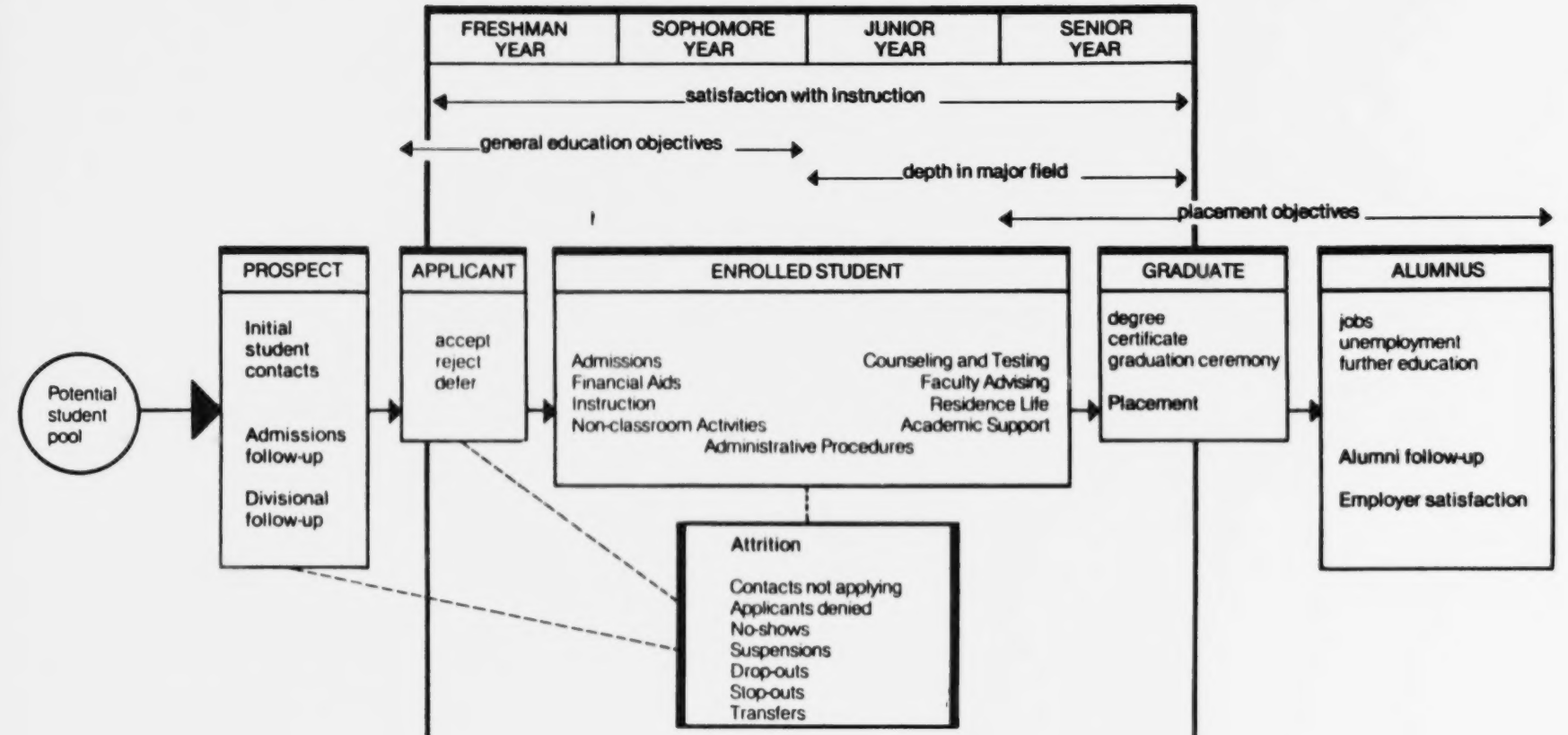
- IDENTIFIED FOCAL POINTS/AREAS TO MEASURE PERFORMANCE
- IDENTIFIED QUALITY INDICATORS
- UTILIZED STANDARD INSTRUMENTS TO FACILITATE INSTITUTIONAL AND NATIONAL COMPARISON
- DEFINED ASSESSMENT DATA (DEMOGRAPHIC, TEST, SURVEY)

NORTHEAST MISSOURI STATE UNIVERSITY — 1985

THE VALUE ADDED MODEL OF ASSESSMENT (Begun in 1973) . . .

- MEASURES CHANGE IN STUDENT DEVELOPMENT
- MEASURES INTEGRITY OF THE DEGREE (IN PURSUIT OF DEGREES WITH INTEGRITY: A VALUE ADDED APPROACH TO UNDERGRADUATE ASSESSMENT)
- INVOLVES STUDENTS AND FACULTY IN LEARNING AND LEARNING OUTCOMES
- PROMOTES CURRICULUM EXAMINATION AND PROGRAM CHANGE (E.G., FIVE-YEAR TEACHER EDUCATION PROFESSIONAL PROGRAM)
- RAISES QUESTIONS AND ISSUES FOR THE EDUCATIONAL AGENDA
- PROVIDES DIRECTION IN LONG-RANGE PLANNING
- SERVES AS A QUALITY CONTROL
- PROMOTES EDUCATIONAL EXCELLENCE and A UNIVERSITY "CULTURE"

OUTCOME GOALS



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COMPOSITE

Year of Soph Testing	Freshman		Sophomore		Change in %-ile Rank	n=students
	mean	%ile	mean	%ile		
1979-1980	19.7	63.2	20.3	66.8	+ 3.6	445
1980-1981	19.7	63.2	20.2	66.2	+ 3.0	415
1981-1982	19.5	62.0	19.8	63.8	+ 1.8	413
1982-1983	20.0	65.0	20.8	69.8	+ 4.8	308
1983-1984	20.5	68.0	21.6	73.4	+ 5.4	608
1984-1985	20.0	65.0	21.5	73.0	+ 8.0	533

ENGLISH

Year of Soph Testing	Freshman		Sophomore		Change in %-ile Rank	n=students
	mean	%ile	mean	%ile		
1979-1980	19.1	59.8	19.7	64.6	+ 4.8	445
1980-1981	19.3	61.4	19.9	66.2	+ 4.8	415
1981-1982	18.8	57.6	19.8	65.4	+ 7.8	413
1982-1983	19.1	59.6	20.3	69.4	+ 9.8	308
1983-1984	19.4	62.2	20.7	72.6	+ 10.4	608
1984-1985	19.0	59.0	20.4	70.2	+ 11.2	533

MATHEMATICS

Year of Soph Testing	Freshman		Sophomore		Change in %-ile Rank	n=students
	mean	%ile	mean	%ile		
1979-1980	18.4	60.0	18.0	58.0	- 2.0	445
1980-1981	17.9	57.6	18.0	58.0	+ 0.4	415
1981-1982	17.9	57.6	17.8	57.2	- 0.4	413
1982-1983	18.5	60.5	19.0	63.0	+ 2.5	308
1983-1984	19.8	67.0	20.3	69.2	+ 2.2	608
1984-1985	18.8	62.0	19.5	65.5	+ 3.5	533

SOCIAL SCIENCE

Year of Soph Testing	Freshman		Sophomore		Change in %-ile Rank	n=students
	mean	%ile	mean	%ile		
1979-1980	18.8	61.4	20.2	66.8	+ 5.4	445
1980-1981	18.8	61.4	19.7	64.8	+ 3.4	415
1981-1982	19.1	62.4	19.8	65.2	+ 2.8	413
1982-1983	19.3	63.2	20.6	68.4	+ 5.2	308
1983-1984	19.3	63.2	20.9	69.6	+ 6.4	608
1984-1985	19.1	62.4	21.5	71.5	+ 9.1	533

NATURAL SCIENCE

Year of Soph Testing	Freshman		Sophomore		Change in %-ile Rank	n=students
	mean	%ile	mean	%ile		
1979-1980	22.1	60.5	22.6	63.0	+ 2.5	445
1980-1981	22.1	60.5	22.6	63.0	+ 2.5	415
1981-1982	21.6	58.0	21.5	57.5	- 0.5	413
1982-1983	22.3	61.5	22.7	63.5	+ 2.0	308
1983-1984	22.9	64.5	23.8	68.2	+ 3.7	608
1984-1985	22.4	62.0	24.1	69.5	+ 7.5	533

COMPARATIVE STUDY IN VALUE-ADDED
COLLEGE OUTCOMES MEASURES PROJECT (COMP)
PRETEST/POSTTEST MEANS -- FRESHMEN VS. SOPHOMORES

TOTAL SCORE

Year of Soph Testing	Freshman Means		Sophomore Means		Change in %-ile Rank	n=Students tested
	Score	%-tile	Score	%-tile		
1983-1984	177.09	57.9	181.13	67.1	+ 9.20	298
1984-1985	173.62	49.2	184.63	74.3	+ 25.10	451

FUNCTIONING IN SOCIAL INSTITUTIONS

Year of Soph Testing	Freshman		Sophomore		Change in %-ile Rank	n=Students tested
	Score	%-tile	Score	%-tile		
1983-1984	60.70	58.2	61.53	63.1	+ 4.90	298
1984-1985	58.86	47.0	62.02	66.5	+ 19.50	451

USING SCIENCE

Year of Soph Testing	Freshman		Sophomore		Change in %-ile Rank	n=Students tested
	Score	%-tile	Score	%-tile		
1983-1984	60.78	59.8	61.67	64.6	+ 4.80	298
1984-1985	60.64	58.5	62.84	70.5	+ 12.00	451

USING THE ARTS

Year of Soph Testing	Freshman		Sophomore		Change in %-ile Rank	n=Students tested
	Score	%-tile	Score	%-tile		
1983-1984	56.37	62.8	58.47	73.7	+ 10.90	298
1984-1985	55.28	56.3	60.36	82.6	+ 26.30	451

COMMUNICATING

Year of Soph Testing	Freshman		Sophomore		Change in %-ile Rank	n=Students tested
	Score	%-tile	Score	%-tile		
1983-1984	49.63	56.6	50.24	60.0	+ 3.40	298
1984-1985	49.13	54.0	53.13	75.8	+ 21.80	451

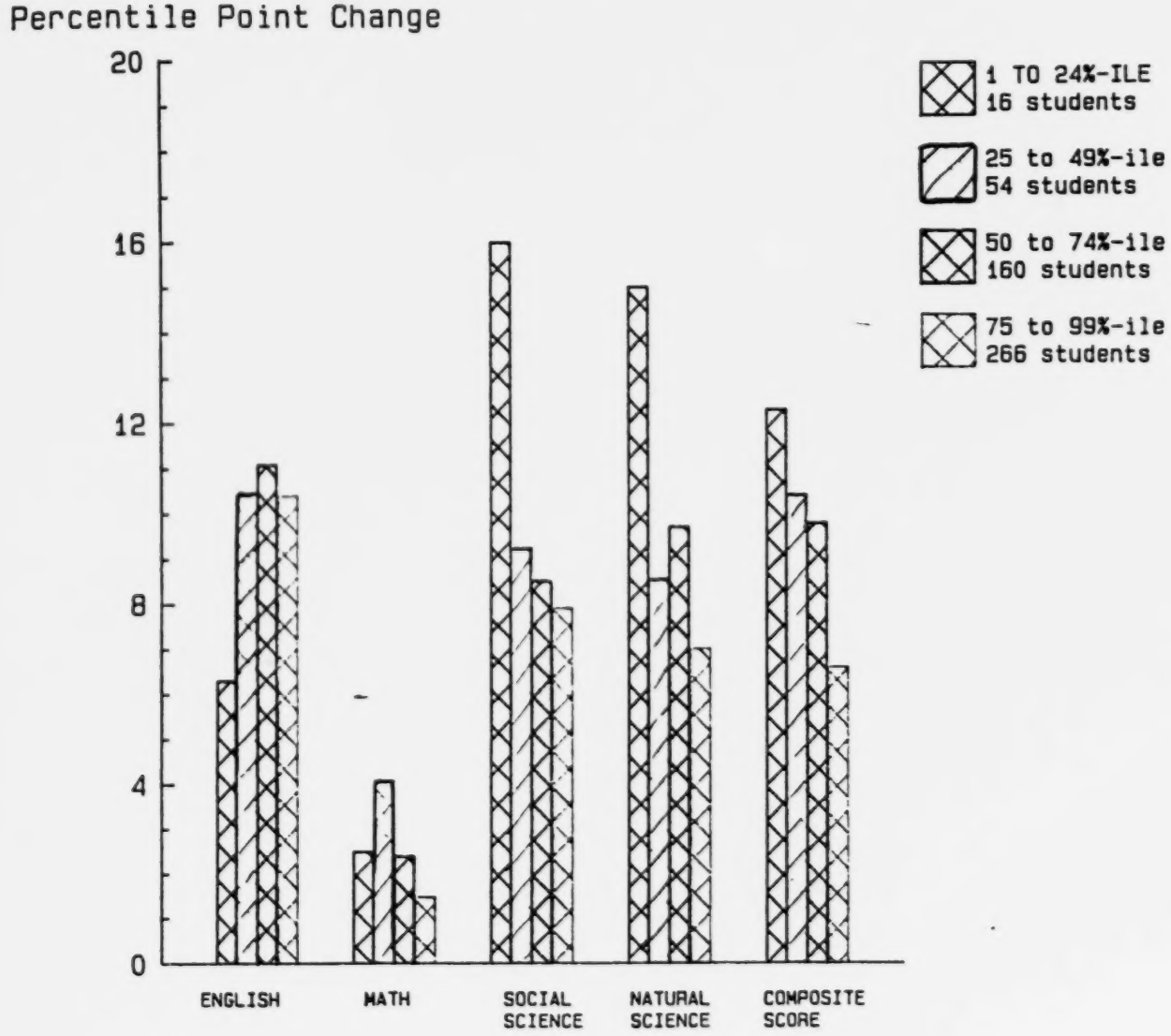
SOLVING PROBLEMS

Year of Soph Testing	Freshman		Sophomore		Change in %-ile Rank	n=Students tested
	Score	%-tile	Score	%-tile		
1983-1984	73.00	59.8	74.64	68.4	+ 8.60	298
1984-1985	71.14	50.3	73.99	66.2	+ 15.90	451

CLARIFYING VALUES

Year of Soph Testing	Freshman		Sophomore		Change in %-ile Rank	n=Students tested
	Score	%-tile	Score	%-tile		
1983-1984	54.77	57.8	56.00	67.4	+ 9.60	298
1984-1985	53.90	49.5	57.39	74.4	+ 24.90	451

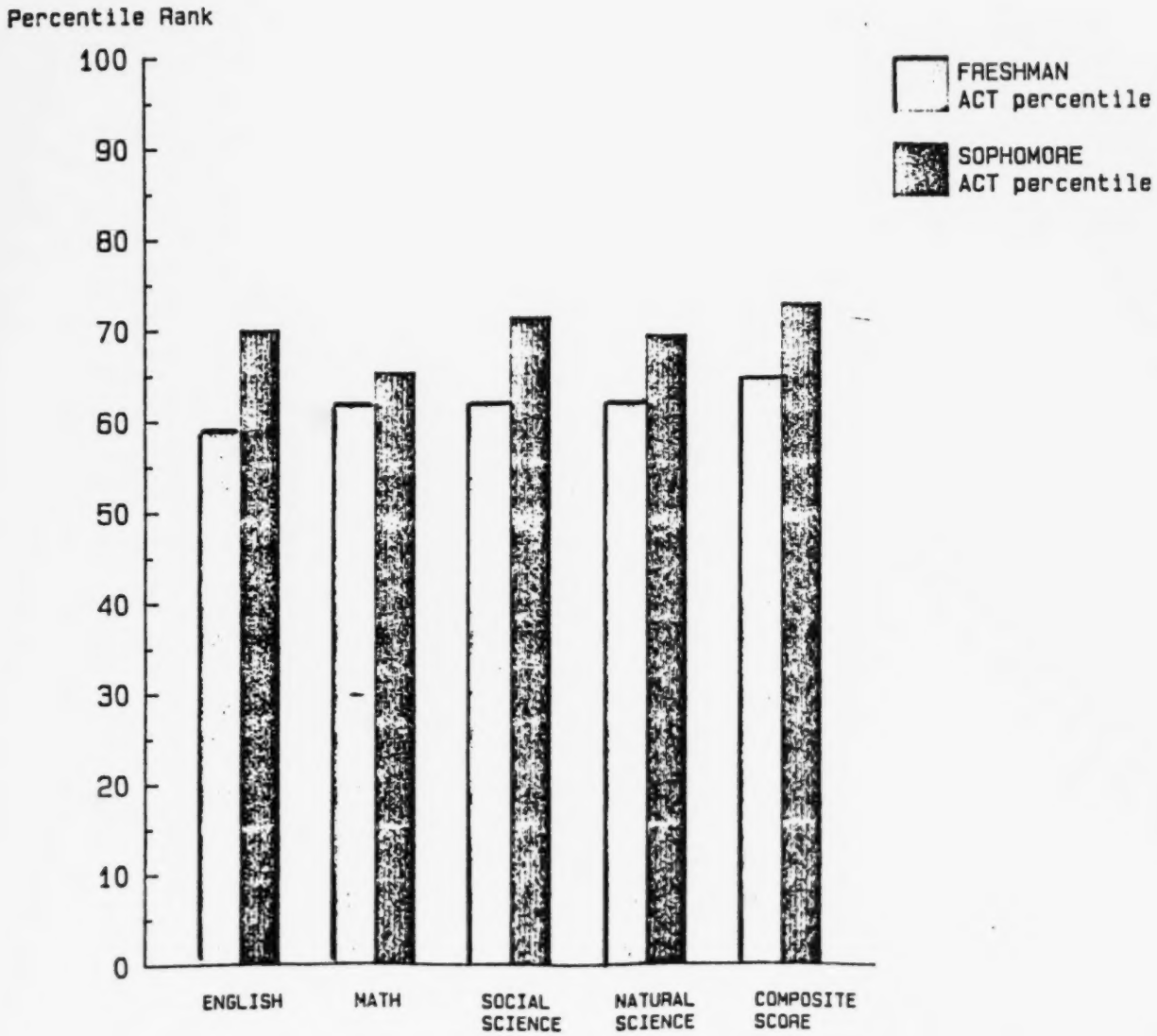
1985 ACT PERCENTILE CHANGE STUDY
University Summary
By H.S. Rank Quartile



NORTHEAST MISSOURI STATE UNIVERSITY
533 STUDENTS TESTED

7-19-85
0001.ACT

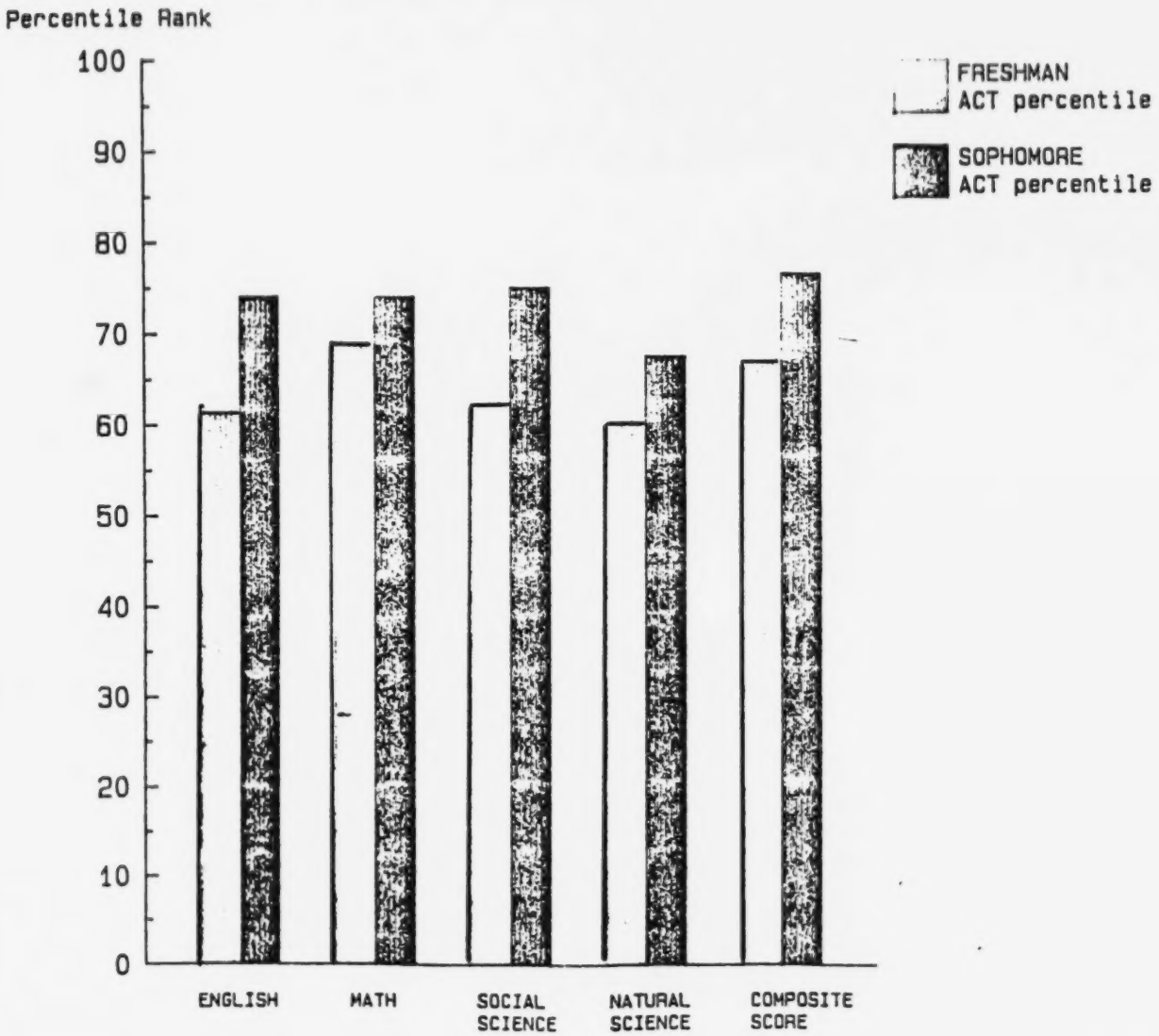
1985 ACT PERCENTILE CHANGE STUDY
University Summary
Freshman vs. Sophomore Percentile Means



NORTHEAST MISSOURI STATE UNIVERSITY
533 students tested

7-19-85
0008.ACT

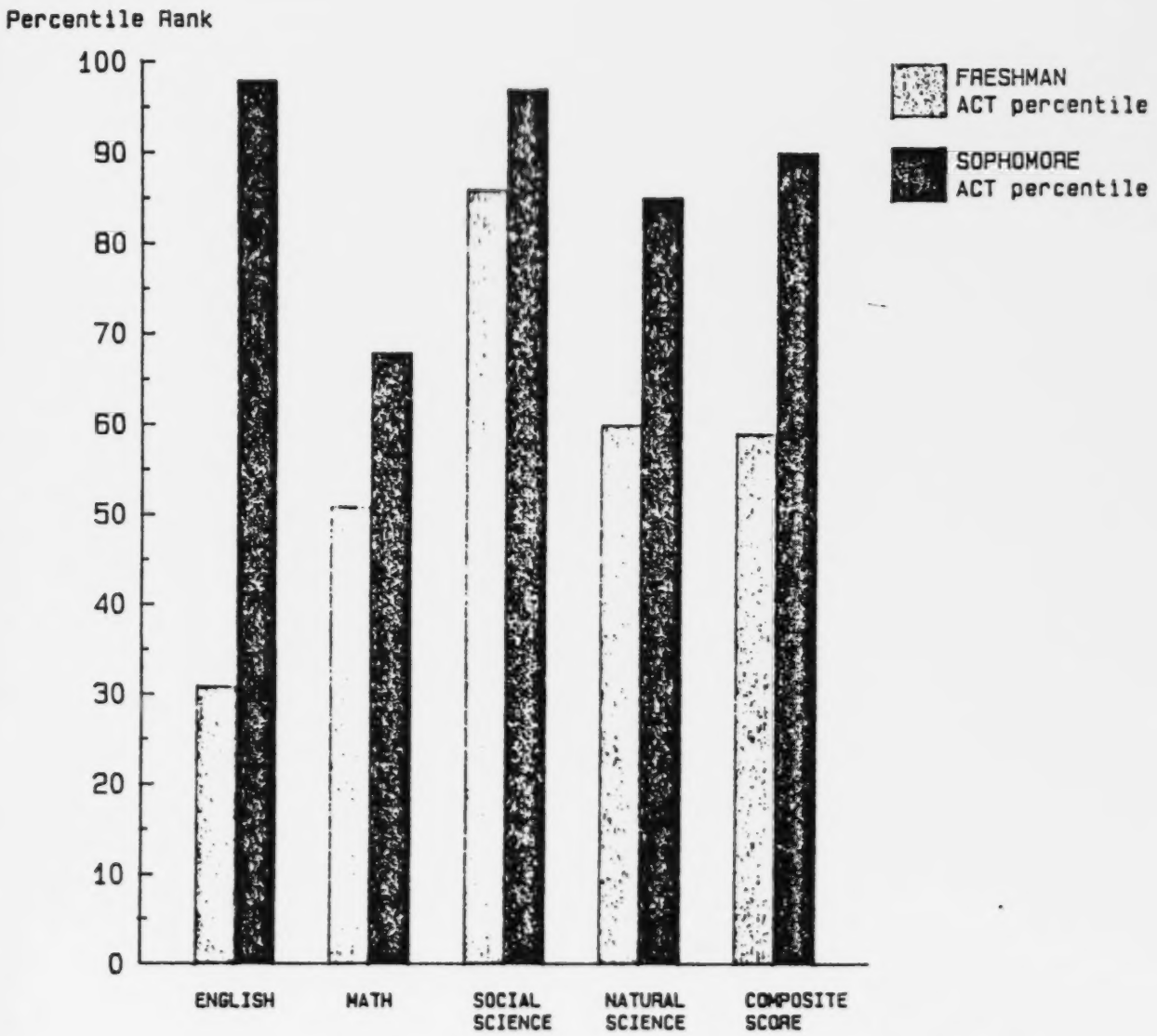
1985 ACT PERCENTILE CHANGE STUDY
Business Administration
Freshman vs. Sophomore Percentile Means



NORTHEAST MISSOURI STATE UNIVERSITY
75 students tested

7-19-85
0007.ACT

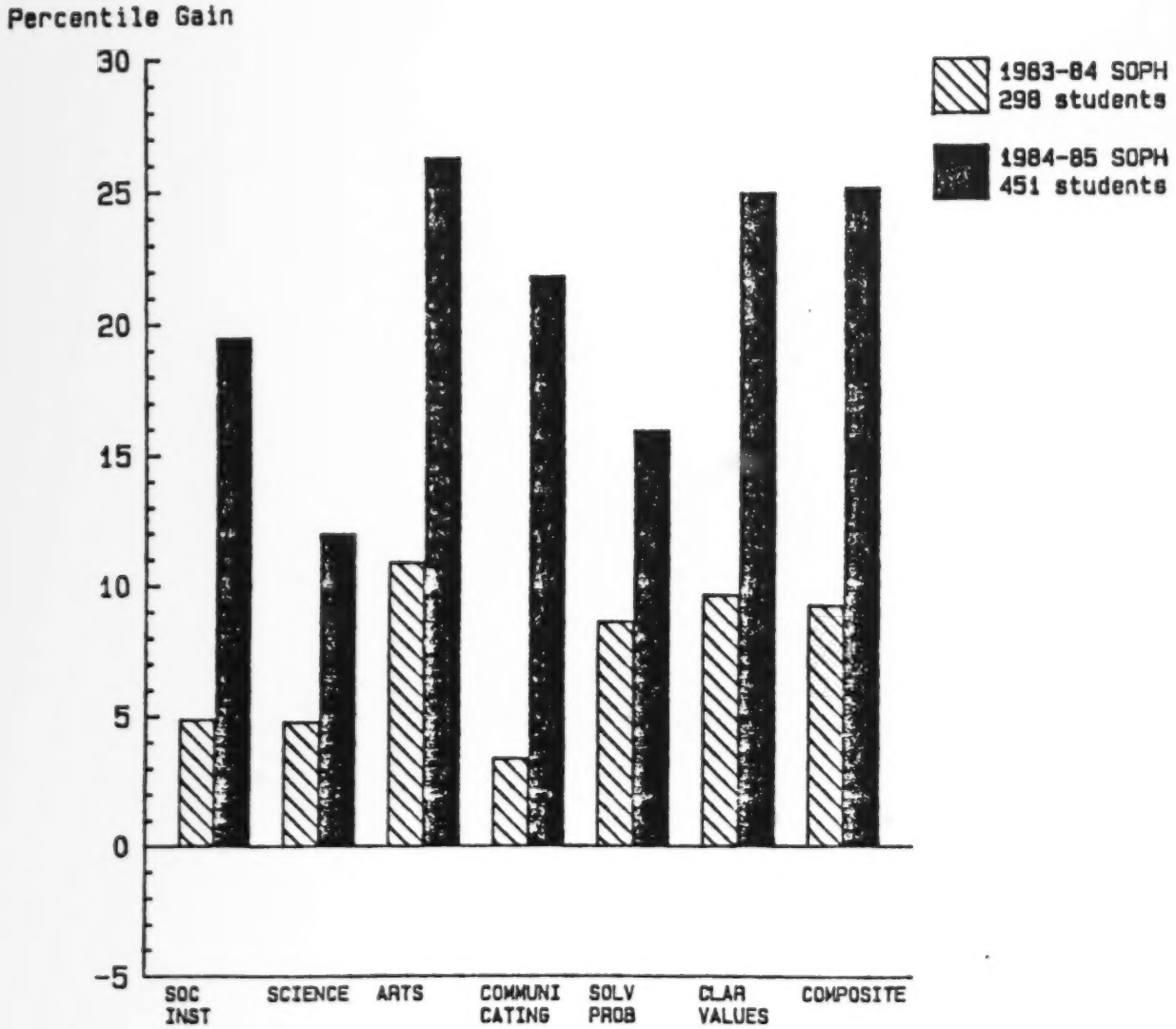
1983 ACT PERCENTILE CHANGE STUDY
Accounting Student



NORTHEAST MISSOURI STATE UNIVERSITY

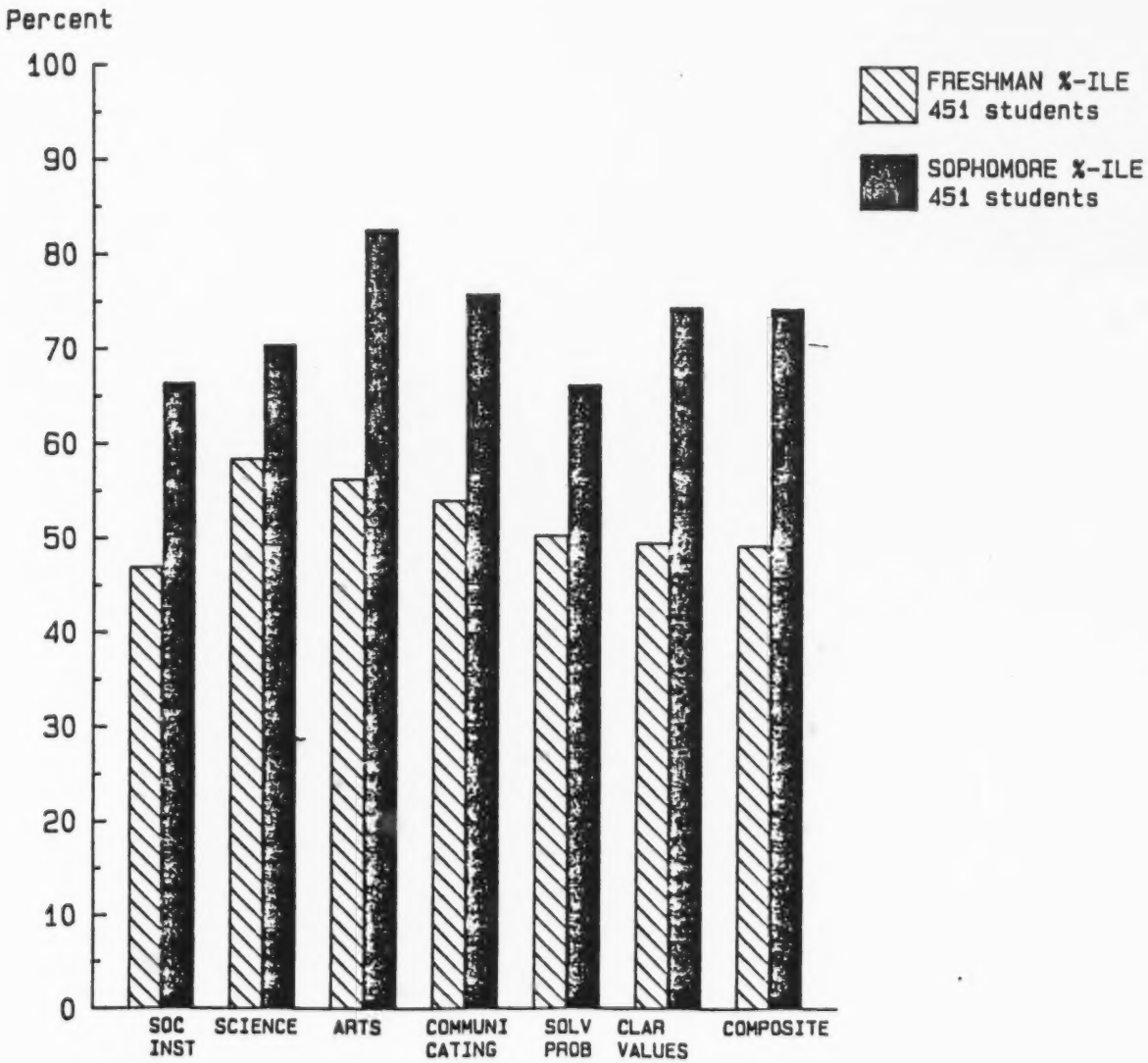
7-19-85
0013.ACT

COMP PERCENTILE CHANGE STUDY
%-ILE GAIN FRESHMAN YEAR VS. SOPHOMORE YEAR
UNIVERSITY SUMMARY



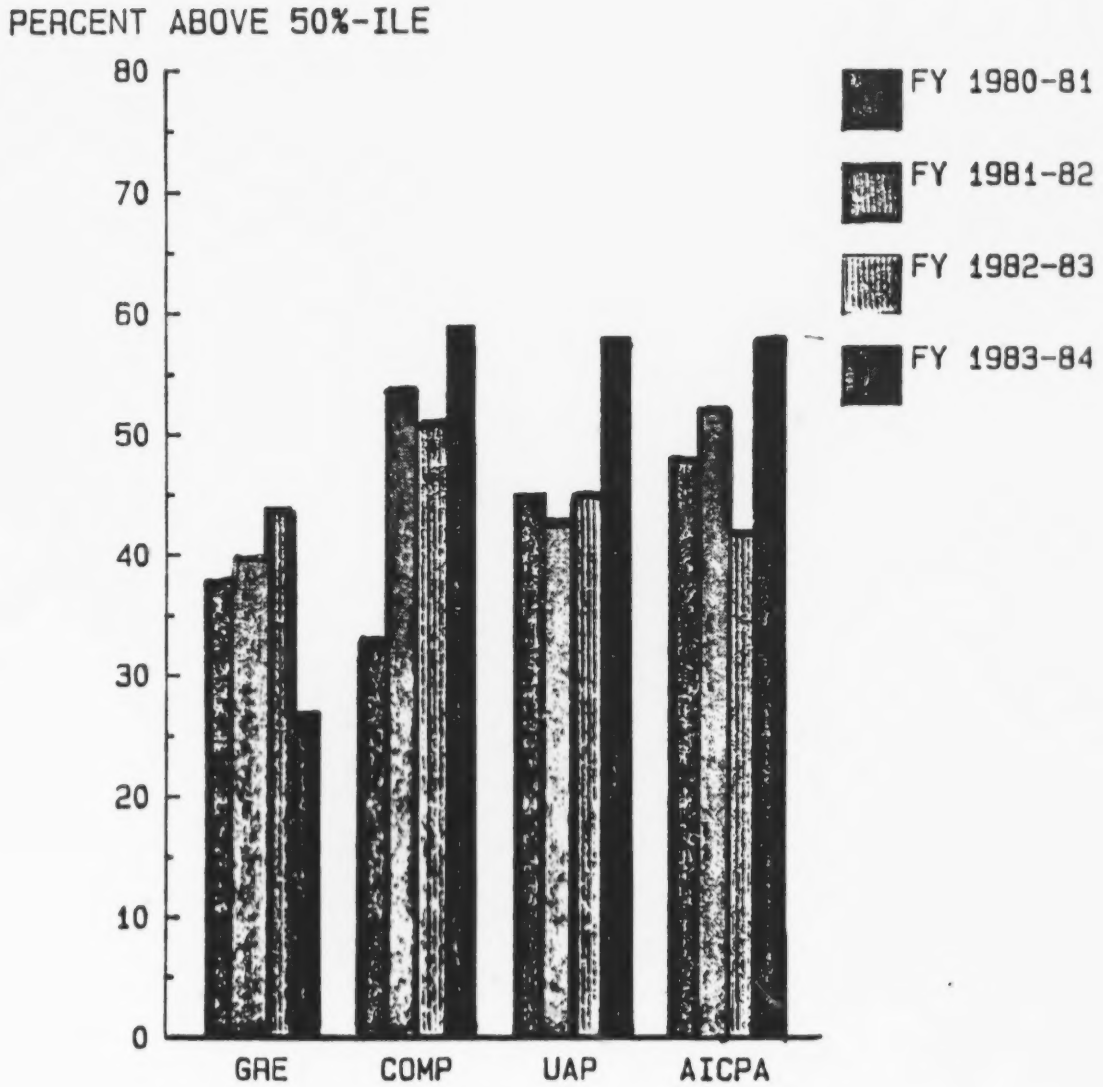
NORTHEAST MISSOURI STATE UNIVERSITY

1985 COMP PERCENTILE CHANGE STUDY
University Summary
Freshman vs. Sophomore Percentile Means



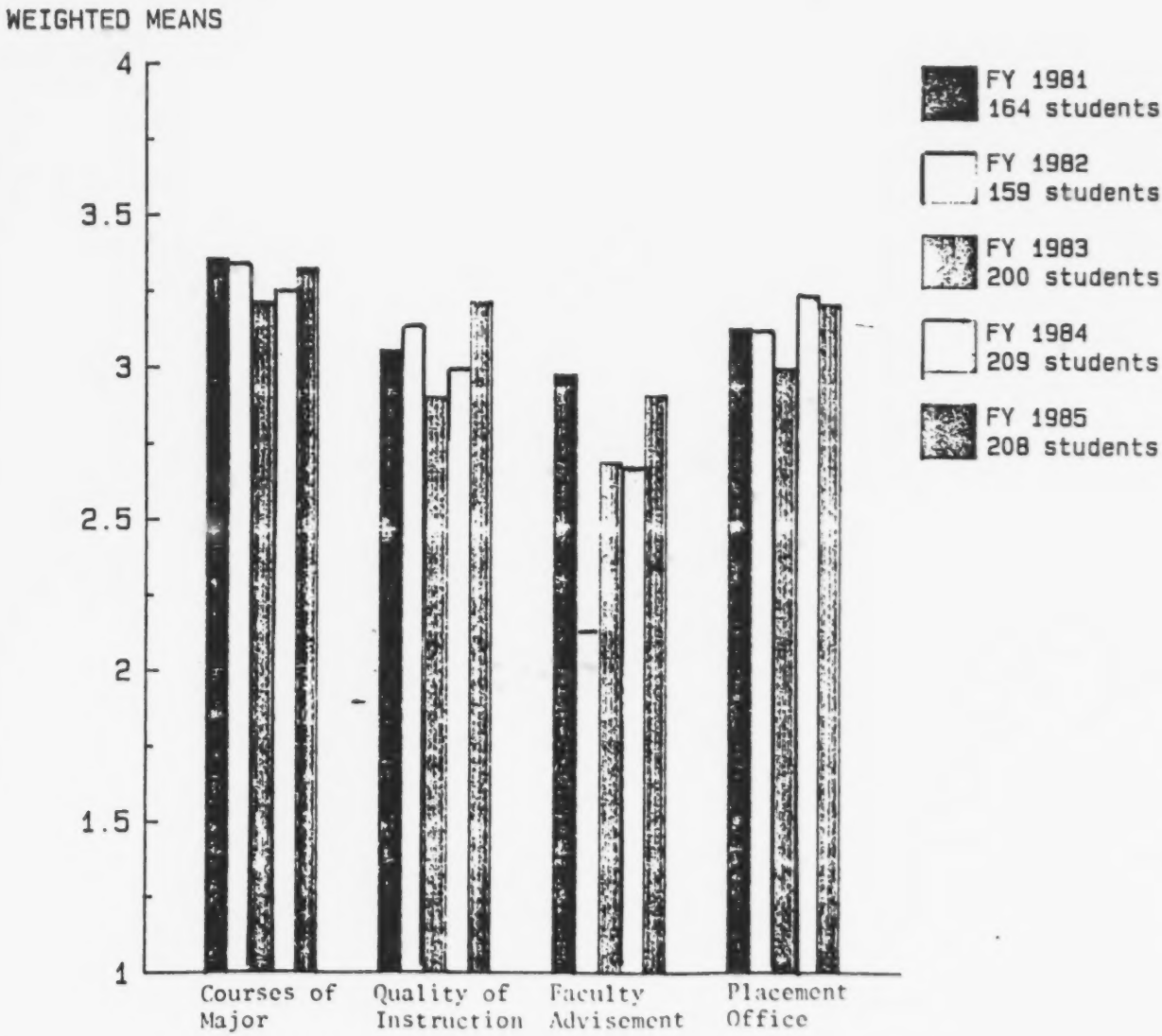
NORTHEAST MISSOURI STATE UNIVERSITY

SENIOR EXAMINATION DATA
Percent Achieving 50%-ile and Above
University Summary



NORTHEAST MISSOURI STATE UNIVERSITY

GRADUATING STUDENT QUESTIONNAIRE
Weighted Means On Student Satisfaction
Discipline: Business Administration



NORTHEAST MISSOURI STATE UNIVERSITY
4.0 Scale

7-19-85
0012.GSQ

Instructional Budget Summary

General Knowledge

INSTITUTIONAL PERFORMANCE GOAL, BUDGET FY 1985:

NMSU aims to increase the knowledge and understanding in general education as measured on the sophomore American College Testing Residual Exam (ACT) and the College Outcome Measures Project (COMP) with a four percentile-point increase in sophomore scores over freshman scores; to increase student ratings as indicated on the Graduating Student Questionnaire (GSQ) in (1) overall satisfaction toward general education by .05, and (2) cultural awareness and participation in cultural and social events by .06; to increase student ratings to 2.70 in the following as indicated on the Institutional Student Survey (ISS): (1) instruction in writing, (2) understanding and applying mathematics, (3) understanding different philosophies and cultures, (4) understanding and applying scientific principles, (5) understanding the interaction of man and his environment; and to raise satisfaction with computer services indicated on the ISS by .14.

Personal Service		1985 Program Improvements
$120,165		Five FTE Faculty
Equipment and Operations		**1985 Program Improvements**
$41,020	$ 2,000	Faculty Development
	9,000	Program Review
	17,000	New Personnel Costs
	9,000	Computer Software
	3,520	Professional Services
$161,185		

Quality Performance Measurements	1983	1984	1985	w/Imprv.
SOPHOMORE TEST:				
ACT%-ile increase	2.0	2.0	2.0	4.0
COMP%ile increase	2.0	2.0	2.0	4.0
GSQ:				
Overall rating of General Education	2.91	2.91	2.91	2.96
Cultural awareness	2.14	2.14	2.14	2.20
ISS:				
Instruction in writing	2.66	2.66	2.66	2.70
Understanding/applying math	2.46	2.46	2.46	2.70
Understanding cultures	2.54	2.54	2.54	2.70
Understanding/applying scientific principles	2.46	2.46	2.46	2.70
Understanding interaction of man and environment	2.64	2.64	2.64	2.70
Computer services	3.01	3.01	3.01	3.15

The addition of five FTE faculty in the area of General Education will allow the institution to place more emphasis on personalized learning as a result of reduced class size and teacher load. More individualized assistance and interest can be given to the students by the faculty. Faculty morale and preparation time will be improved. This personal concern will increase student motivation toward learning and increase satisfaction toward the general education curriculum; this in turn will affect positively knowledge gained through the comprehensive, interdisciplinary learning experiences within the general education requirement.

The monies requested for the computer-assisted instruction and other software will increase the students' awareness and knowledge of computer and other skills which are a growing requirement in good job placement for graduates. The professional services of consultants and guest clinicians will stimulate, reinforce, and enrich both faculty and students.

Instructional Budget Summary

Specific Knowledge

INSTITUTIONAL PERFORMANCE GOAL, BUDGET FY 1985:

NMSU aims to effect necessary gains in achievement within the academic major on the Senior Examinations with 57 percent scoring above the 50th percentile of the national norms; to achieve a University-wide increase in student satisfaction on the following Graduating Student Questionnaire (GSQ) responses: (1) Knowledge in the academic major by .07, (2) courses in the major by .05, (3) availability of courses by .04, and (4) the quality of instruction by .06; and to improve the level of satisfaction indicated on the Institutional Student Survey (ISS) regarding (1) course content in the major by .04, (2) instruction in the major by .05, (3) academic advising by .08, and (4) value of information provided by the advisor by .10.

Personal Service		1985 Program Improvements
$192,264		Eight FTE Faculty
Equipment and Operations		**1985 Program Improvements**
$146,551	$11,500	Professional Services
	28,000	New Personnel Costs
	22,000	Faculty Development
	3,200	Program Review
	60,851	Computer Equipment
	15,000	Computer Software
	6,000	Equipment
$338,815		

Quality Performance Measurements	1983	1984	1985	w/Imprv.
SENIOR EXAM:				
% achieve 50%	54%	54%	54%	57%
GSQ:				
Knowledge in the major	2.74	2.74	2.74	2.81
Courses in the major	3.37	3.37	3.37	3.42
Availability of courses	3.15	3.15	3.15	3.19
Quality of instruction	3.13	3.13	3.13	3.19
ISS:				
Course content	3.08	3.08	3.08	3.12
Instruction in major	3.03	3.03	3.03	3.08
Academic advising	2.87	2.87	2.87	2.95
Value of advisor info	2.85	2.85	2.85	2.95

A primary purpose of higher education is the acquisition of specialized and in-depth knowledge by the student. NMSU aims to increase the achievement of its students in their academic fields. Eight additional (FTE) faculty will allow for reasonable student-teacher ratios with a consequent increase in personalized attention and instructional follow-up. The teaching-learning process will be improved, stimulated by the availability of time to instruct more efficiently and individually. Quality of instruction, achievement on the senior exams, availability of courses, accessibility of instructors, and personal attitudes will improve. Implementation of these goals will be further strengthened through the faculty development monies which will be used to offer in-service opportunities to alert faculty to new and better methods of teaching and advising students. Computer and other essential equipment purchases will supplement faculty capabilities as educators, increase the availability of instructional resources to both faculty and students, provide more efficient teaching procedures, and promote positive attitudes toward the acquisition of knowledge and skills in the courses of the academic major.

BUSINESS DIVISION

PERFORMANCE GOAL - BUDGET FISCAL YEAR 1985: To effect necessary gains in achievement as indicated on the Senior Exams with 56 percent scoring above the 50th percentile of the national norms; to increase the results on the Graduating Student Questionnaire (GSQ) (1) by .07 on the subject matter knowledge base, (2) by .04 on the quality of instruction, (3) by .05 on instructor accessibility, (4) by .06 on placement services, and (5) by .03 on cultural appreciation; to increase the results on the Institutional Student Survey (ISS) by .05 in the following: (1) instruction in writing, (2) understanding different philosophies and cultures, (3) academic advising, (4) value of information given by advisor, and (5) course availability.

Personal Service	
1985 Program Improvements	
$48,066	Two FTE Faculty
Equipment and Operations	
1985 Program Improvements	
$ 1,000	Faculty Enrichment/Development
1,000	Professional Services
6,000	Equipment Purchase/Replacement
7,000	New Personnel Costs
Total	
1985 Program Improvements	
$63,066	

Measurements				
Variable	1983	1984	1985	w/Imprv.
No. of Majors	1,749	1,800	1,800	
Degrees/Certificates	422	430	440	
Credit Hours	13,832	15,264	15,264	
SENIOR EXAM:				
% achieve 50%-ile	54%	54%	54%	57%
GSQ:				
Increase knowledge	2.79	2.79	2.79	2.86
Quality of instruction	3.07	3.07	3.07	3.11
Accessblty of instrctr	3.17	3.17	3.17	3.22
Placement services	3.08	3.08	3.08	3.14
Increase culture	2.08	2.08	2.08	2.11
ISS:				
Instrction in writing	2.59	2.59	2.59	2.64
Understndng cultures	2.39	2.39	2.39	2.44
Academic advising	2.88	2.88	2.88	2.93
Value of advisor info	2.83	2.83	2.83	2.88
Course availability	2.31	2.31	2.31	2.36

Rationale Narrative

Students enrolled in the business programs will examine business principles, theories, and policies; develop problem solving skills; and develop marketable skills to achieve success in the world of work. Faculty enrichment, professional services, and instructional supplies monies will be used to provide consultants and materials on advising, instruction, and curriculum development. Equipment replacement monies will strengthen faculty capabilities as educators as well as provide improved instructional resources to students. The employment of strong subject matter faculty and a peer counselor will help improve the knowledge base in the functional business areas. The overall effect will be greater instructor accessibility, improved quality of instruction, more involvement in placement services, increased learning, and higher achievement on the senior examinations.

OUTCOMES

ASSESSMENT "SPIN-OFFS"

- FACULTY DISCUSSIONS
- LEADERSHIP DIRECTION
- FACULTY SENATE AGENDA/ACADEMIC POLICIES
- CURRICULUM DISCUSSION/MODIFICATIONS
- INSTRUCTIONAL STRATEGIES
- ACADEMIC ADVISEMENT
- STUDENT EXPECTATIONS
- RECRUITMENT INVOLVEMENT
- STUDENT GOALS/DISCUSSION
- STUDENT SENATE/SCHOOL NEWSPAPER AGENDA
- NON-CLASSROOM ACTIVITIES, E.G. GREEK SYSTEM
- RESIDENCE LIFE
- CAMPUS-WIDE EDUCATIONAL AGENDA

RESIDENCE LIFE
CHANGES TO EFFECT IMPROVED LEARNING

GPA: Does it matter where you live?

QUIET FLOOR CONCEPT

QUIET STUDY HOURS IN ALL HOUSES

HALL EDUCATIONAL PROGRAMS

ACADEMIC RECOGNITION CEREMONY

FLOOR GPA RECOGNITION

FACULTY INVOLVEMENT AT THE HALLS

FREE STUDENT TUTORING SERVICE

ACADEMIC RESOURCE CENTERS

MICROCOMPUTER AVAILABILITY

INCREASED EMPLOYMENT/HIRING STANDARDS

STAFF POSITION REQUIREMENTS RAISED

COED HALL AND COED HALL REQUIREMENT

STUDENT PARTICIPATION/ACTIVITIES

CULTURAL ACTIVITIES

index
Northeast Missouri State University

EDITORIAL

Senate committee plans hearings on effectiveness of value added

The value-added concept is on the minds of administrators, faculty members and [illegible] but not everybody has the [illegible] by students on how value added instructors are practicing it. The [illegible]

Sophomore tests aid evaluation of the University's effectiveness

Last week, sophomores participated in the Sophomore Test Program at Science and Violette Hall.

'I feel the sophomore test

Student Senate takes action to support faculty concern over academic standards

by Sally Thompson

FROM THE STAFF

Value added overlooked; pressure is own creation

The University a result of its value-added con deservedly but of

I do not believe I can get the most out of college by going to [illegible] and going

I volunteer when I should fade into the background. I choose to be involved rather than just

Value-added hearings clarify concept's role, justify effectiveness

by Verna Elrod

EDITORIAL

Seniors urged to take test seriously

Senior tests will be held Nov. 9 through Dec. 10 for all seniors graduating in December or graduating in May and not attending [illegible]

This

Poor teaching detracts from value-added ideals despite University goals

Concern voiced for faculty standards

Although students are being given stiffer academic standards, [illegible] on instructors in the classroom. He

An ombudsman would handle grievances between faculty and

EDITORIAL

Plan to upgrade fraternity G. P. A.'s

The plan to upgrade fraternity grade point averages this fall is constructive help for increasing academic standards.

reward and punitive action for fraternities not retain their base G.P.A.

Posted rankings encourage more positive testing attitude

One of the links in the value-added chain has been the students' willingness [illegible] to take their exercises tests seriously. Without this cooperation

are also posted in the Student Union building in a place of honor. In addition, high-scoring, on-campus students were invited to the governor's

EDITORIAL

University failing to demonstrate meaning of test results to students

Two weeks ago, the University gave another in its continuing list of tests to evaluate students and the University's performance in educating these students. This group of tests were called the sophomore tests.

Sending a student a pie with a list of raw test c

Value Added—fact or fiction?

Ashcroft speaks to honor high academic achievers

by Sharon Johnson

Gov. John Ashcroft spoke

Council and the University of Chicago Hill Law School, shook of the students for their academic

studying education on the condition they teach at Missouri for five years, was another topic

Value added pioneers education measurement

'The real purpose of value added is to demonstrate the impact of various programs on the individual students.'

Quiet Week plan can contribute to value-added academic concept

by Mike Hale Editor

V

This time is now to plan a tradition which ensures the integrity of the value added concept of

Furthermore, professors have methods and approaches available to keep students from skip-

Greeks attempt to bolster GPAs as academic standards stiffen

by Jeanne Hamilton

[illegible] and working for the greater [illegible] by pledging study [illegible] and [illegible] the average [illegible] fraternity [illegible] Each chapter has [illegible] and [illegible]

NORTHEAST MISSOURI STATE UNIVERSITY — 1985

THE VALUE ADDED MODEL OF ASSESSMENT (Begun in 1973) . . .

- MEASURES CHANGE IN STUDENT DEVELOPMENT
- MEASURES INTEGRITY OF THE DEGREE (IN PURSUIT OF DEGREES WITH INTEGRITY: A VALUE ADDED APPROACH TO UNDERGRADUATE ASSESSMENT)
- INVOLVES STUDENTS AND FACULTY IN LEARNING AND LEARNING OUTCOMES
- PROMOTES CURRICULUM EXAMINATION AND PROGRAM CHANGE (E.G., FIVE-YEAR TEACHER EDUCATION PROFESSIONAL PROGRAM)
- RAISES QUESTIONS AND ISSUES FOR THE EDUCATIONAL AGENDA
- PROVIDES DIRECTION IN LONG-RANGE PLANNING
- SERVES AS A QUALITY CONTROL
- PROMOTES EDUCATIONAL EXCELLENCE and A UNIVERSITY "CULTURE"

QUOTES FROM EDUCATIONAL AND GOVERNMENTAL LEADERS

Higher Education Daily (January 21, 1985):

> "The value-added program at Northeast Missouri State University was a co-recipient of AASCU's G. Theodore Mitau Award for Innovation and Change in State Colleges and Universities. Alexander W. Astin, president of the Higher Education Research Institute at the University of California at Los Angeles and a member of the group that produced the NIE report calls the value-added approach 'a highly promising departure' from tradition, one that 'does not take student learning for granted.'"

Henry L. Ashmore, Associate Executive Director of Commission on Colleges:

> "I agree with you that we in higher education must assume the responsibility of evaluating our products and our functions. The day has passed when an institution can evaluate by intuition and guesswork.
>
> I understand that you have a videotape entitled 'Value-Added Model of Assessment.' Is this something which is available? We are trying to help colleges within our region to develop effective evaluation processes, and such a tape might be valuable to us."

Chester E. Finn, Jr., Assistant Secretary and Counselor to the Secretary, United States Department of Education:

> "President McClain, you and Northeast Missouri State continue to be a source of inspiration to all of us who are interested in the development of better means of gauging and assessing student learning in higher education."

ACTIVITY, American College Testing's national publication (Winter, 1985):

> "In the wake of the publication of A Nation at Risk, there has been increasing recognition that meaningful assessment of the effectiveness of any educational institution or activity must be based on the performance and achievement of students. The value-added approach to assessment used by Northeast Missouri State University provides such a base."

QUOTES FROM EDUCATIONAL AND GOVERNMENTAL LEADERS

The Chronicle of Higher Education (October 2, 1985):

> "This small town in rural northeast Missouri seems an unlikely place for a major trend in higher education to start. But it attracts a steady stream of educators and political leaders, all coming to study Northeast Missouri State University's 'value-added' assessment programs, designed to measure how students are progressing in gaining specific intellectual skills."

The Washington Post (October 17, 1985):

> "The 'value-added' testing used to measure progress at Northeast Missouri State University or 'rising junior' examinations such as those used in Florida and Georgia have been the subjects of wide and frequent discussion recently, and officials expect that the debate ultimately will result in some form of accountability program."

Governor John Ashcroft, Chairman of the National Governors' Association Task Force on College Quality:

> "In an era of increasing competition among universities, survival and success in higher education will be inexorably linked to the ability of a university to carve a specific mission and to pursue that mission with confidence, while achieving excellence. Northeast Missouri State University is doing this, and is doing it well."

Alain Enthoven, Professor of Public and Private Management, Graduate School of Business, Stanford University:

> "Your value-added assessment idea makes so much sense it's amazing it didn't become standard practice years ago."

BIBLIOGRAPHY

Titles of Literature Referencing Northeast Missouri State University
and Its Value Added Model of Assessment
October, 1985

(Published Titles)

Northeast Missouri State University. In Pursuit of Degrees of Integrity: A Value Added Approach to Undergraduate Assessment. Washington, D. C., American Association of State Colleges and Universities, 1984.

Ewell, Peter T. The Self-Regarding Institution: Information for Excellence. Boulder, Colorado: National Center for Higher Education Management Systems, 1984.

Astin, Alexander W. Achieving Educational Excellence: A Critical Assessmemt of Priorities and Practices in Higher Education. San Francisco: Jossey-Bass Publishers, 1985.

Cornell, Gretchen Reising. "The Value-added Approach to the Measurement of Education Quality," Journal of Professional Nursing. November-December, 1985.

McClain, Charles J. and Krueger, Darrell W. "Using Outcomes Assessment: A Case Study in Institutional Change," New Directions in Institutional Research. San Francisco: Jossey-Bass Publishers, September, 1985.

Gilley, J. Wade, et al. Searching for Academic Excellence: Twenty Colleges and Universities on the Move and Their Leaders. ACE/Macmillan, 1986.

Adelman, Clifford. Starting with Students: Promising Approaches in American Higher Education. Published by the National Institute of Education in cooperation with the American Association for Higher Education, 1985.

Coleman, Donald G. "Strategic Planning: A Case Study in University Change Through Value Added." Accepted for publication October, 1985, in Planning and Change.

Smith, Terry B. and Weith, Robert A. "Value-Added: The Student Affairs Professional as Promoter of Intellectual Development," NASPA Journal, Fall, 1985.

Huffman, Lauren. "Preparing for the Business World: Value-Added Assessment in Higher Education," Today's Manager, January, 1986.